

**February 26, 2004**

## **FINAL AIR TOXICS REGULATION FOR PLYWOOD AND COMPOSITE WOOD PRODUCTS**

### **FACT SHEET**

#### **ACTION**

On February 26, 2004, the Environmental Protection Agency (EPA) finalized a rule to reduce emissions of toxic air pollutants from facilities that manufacture plywood and veneer; particleboard; medium density fiberboard; hardboard; fiberboard; oriented strandboard; and engineered wood products. The rule will reduce air toxics from the manufacturing of Plywood and Composite Wood Products (PCWP) by 11,000 tons per year, a 58 percent decrease from 1997 levels. The final rule will also reduce volatile organic compound emissions by 27,000 tons per year, a 52 percent decrease from 1997 levels.

Toxic air pollutants, also known as air toxics, are those pollutants known or suspected to cause cancer and other serious health or developmental problems. Air toxics emitted during the manufacture of plywood and composite wood products include methanol, formaldehyde, acrolein, acetaldehyde, phenol and propionaldehyde. These toxic pollutants are associated with a variety of adverse health effects, including damage to nasal membranes, reproductive disorders, irritation of eyes and throat, dizziness, headache, and nausea. Some (formaldehyde, acetaldehyde) have been classified as probable or possible human carcinogens.

EPA estimates that about 220 plywood and composite wood products facilities are major sources of air toxics.

The final rule also creates and removes from the list for air toxic control a subcategory of low-risk facilities. The final rule puts eight specific facilities into the low-risk subcategory. However, the final rule sets forth provisions for additional facilities to opt into this subcategory.

This action also finalizes amendments to the effluent limitations guidelines for four subcategories of the timber industry (40 CFR Part 429, Subparts B, C, D, and M). These amendments will exclude from the existing regulations wastewaters generated by specific air pollution control devices installed by facilities to comply with the final PCWP rule. Effluent limitations for process wastewaters generated by air pollution control devices discharged from these facilities will be developed on a case-by-case basis.

#### **COMPLYING WITH THE RULE REQUIREMENTS**

The final rule provides three options for PCWP manufacturers to meet emissions requirements. These options provide facilities flexibility in meeting the rule requirements while ensuring environmental

protection:

1. Install and use emissions control systems with an efficiency of at least 90 percent on specific emissions points at the facility;
2. Meet an emissions limit by using pollution prevention techniques such as reformulating raw materials or modifying manufacturing processes; and
3. Average emissions from several emissions points at a facility.

Most facilities will comply with this rule using three types of equipment: regenerative thermal oxidizers; catalytic thermal oxidizers; or biofilters when complying with option number one or three.

Each facility that opts into the low-risk subcategory must demonstrate that its air toxic emissions pose risks below certain health effects thresholds. The facility has two options to qualify for the low-risk subcategory. Both options ensure that facilities in the low-risk subcategory meet the low-risk criteria of one in one million cancer risk and less than or equal to a hazard index of 1.0. Low-risk demonstrations must be submitted to EPA for approval.

A The first approach allows facility owners or operators to use a limited number of site-specific input parameters to demonstrate to EPA that their facility is low-risk.

A The second approach allows facility owners or operators to use a site-specific risk assessment to demonstrate to EPA that their facility is low risk. The site-specific risk assessment requires more effort, but produces results that are less likely to overstate risk.

Facilities that qualify for the low-risk subcategory established in this final rule must assume federally enforceable emissions limitations. These limits ensure that their air toxics emissions do not exceed levels used to qualify for the compliance alternative.

EPA estimates that potentially 147 plywood manufacturing facilities may qualify for the low-risk subcategory. Additional facilities may take action to control their air toxics emissions in order to qualify as low-risk, thus increasing the number of eligible facilities to more than 147.

As part of this rule, EPA is identifying eight plywood manufacturers that already qualify as low-risk. These facilities include:

- A Georgia-Pacific Plywood Plant, Monroeville, AL
- A Georgia-Pacific - Hawthorne Plywood Mill, Hawthorne, FL
- A Oregon Panel Products, Lebanon, OR
- A Hardel Mutual Plywood Corporation, Chehalis, WA
- A Hood Industries, Incorporated, Wiggins, MS
- A Plum Creek Manufacturing, LP, Kalispell, MT
- A Potlatch Corporation - St. Maries Plywood, St. Maries, ID
- A SierraPine Limited, Rocklin MDF, Rocklin, CA

## **HEALTH AND ENVIRONMENTAL BENEFITS**

The final rule will reduce emissions of acetaldehyde, acrolein, formaldehyde, methanol, phenol, propionaldehyde and other toxic air pollutants by 11,000 tons per year, or a 58% percent reduction from 1997 levels. Depending on the number of facilities eligible for the low-risk subcategory, these emission reductions could change to 6,600 tons per year.

The final rule also will reduce the emissions of volatile organic compounds by 27,000 tons per year, a 52 percent reduction from 1997 levels. Volatile organic compounds contribute to the formation of ground-level ozone, or smog. Depending on the number of facilities eligible for the low-risk subcategory, these emission reductions could change to 14,000 tons per year.

EPA estimates the total annualized cost to comply with the final rule will be about \$140 million. These costs could drop to \$74 million depending on the number of facilities eligible for the low-risk subcategory.

## **BACKGROUND**

The Clean Air Act requires EPA to identify categories of industrial facilities, or source categories, that emit one or more listed 188 toxic air pollutants.

For major sources within each source category, the Clean Air Act requires EPA to develop standards that restrict emissions to levels consistent with the lowest-emitting (also called best-performing) plants.

Major sources are those that emit 10 tons per year or more of a single air toxic or 25 tons per year or more of a combination of air toxics.

## **FOR MORE INFORMATION**

To download the final rule from EPA's page on the Worldwide Web, go to <http://www.epa.gov/ttn/oarpg>. For additional information, contact Mary Tom Kissell of the EPA's Office of Air Quality Planning and Standards at (919) 541-4516 or by e-mail at [kissell.mary@epa.gov](mailto:kissell.mary@epa.gov).

EPA's Office of Air and Radiation home page on the Internet contains a wide range of information on the air toxics program, as well as many other air pollution programs and issues. The address is: <http://www.epa.gov/oar/>.